

Junichi Fujikata

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3139999/publications.pdf>

Version: 2024-02-01

78
papers

1,505
citations

471509

17
h-index

330143

37
g-index

78
all docs

78
docs citations

78
times ranked

1434
citing authors

#	ARTICLE	IF	CITATIONS
1	112 Gb/s PAM-4 Silicon Photonics Receiver Integrated With SiGe-BiCMOS Linear TIA. IEEE Photonics Technology Letters, 2022, 34, 189-192.	2.5	5
2	Modulation bandwidth improvement of III-V/Si hybrid MOS optical modulator by reducing parasitic capacitance. Optics Express, 2022, 30, 22848.	3.4	4
3	High-efficiency and high-speed narrow-width MOS capacitor-type Si optical modulator with TM mode excitation. Optics Express, 2021, 29, 10104.	3.4	6
4	Taperless Si hybrid optical phase shifter based on a metal-oxide-semiconductor capacitor using an ultrathin InP membrane. Optics Express, 2020, 28, 35663.	3.4	7
5	High-speed Ge/Si electro-absorption optical modulator in C-band operation wavelengths. Optics Express, 2020, 28, 33123.	3.4	21
6	Low Parasitic Capacitance III-V/Si Hybrid MOS Optical Modulator toward High-speed Modulation. , 2020, , .		3
7	Taper-less III-V/Si Hybrid MOS Optical Phase Shifter using Ultrathin InP Membrane. , 2020, , .		2
8	High-Efficiency of Narrow-Width MOS Capacitor Type Si Optical Modulator with TM Mode Excitation. , 2019, , .		1
9	III-V/Si Hybrid MOS Optical Phase Shifter for Si Photonic Integrated Circuits. Journal of Lightwave Technology, 2019, 37, 1474-1483.	4.6	34
10	High-speed and highly efficient Si optical modulator with strained SiGe layer. Applied Physics Express, 2018, 11, 032201.	2.4	9
11	(Invited) High-Performance Si Optical Modulator and Ge Photodetector and Their Application to Silicon Photonics Integrated Circuit. ECS Transactions, 2018, 86, 17-25.	0.5	2
12	III-V/Si Hybrid MOS Optical Phase Modulator for Si Photonic Integrated Circuits. , 2018, , .		0
13	1.2 Tbps/cm ² Enabling Silicon Photonics IC Technology Based on 40-nm Generation Platform. Journal of Lightwave Technology, 2018, 36, 4701-4712.	4.6	12
14	High-efficiency, Low-loss Optical Phase Modulator based on III-V/Si Hybrid MOS Capacitor. , 2018, , .		3
15	High density optical and electrical interfaces for chip-scale silicon photonic receiver. , 2017, , .		6
16	Study on the effects of the Si capping layer growth conditions on the leakage current of Ge photodetector. Japanese Journal of Applied Physics, 2017, 56, 102201.	1.5	8
17	Efficient low-loss InGaAsP/Si hybrid MOS optical modulator. Nature Photonics, 2017, 11, 486-490.	31.4	166
18	High-performance Si optical modulator with strained p-SiGe layer and its application to 25 Gbps optical transceiver. , 2017, , .		3

#	ARTICLE	IF	CITATIONS
19	High-speed and high-efficiency Si optical modulator with MOS junction, using solid-phase crystallization of polycrystalline silicon. Japanese Journal of Applied Physics, 2016, 55, 042202.	1.5	32
20	High-performance silicon photonics process platform for low-power photonic integrated circuits. , 2016, , .		2
21	High-performance MOS-capacitor-type Si optical modulator and surface-illumination-type Ge photodetector for optical interconnection. Japanese Journal of Applied Physics, 2016, 55, 04EC01.	1.5	15
22	First demonstration of SiGe-based carrier-injection Mach-Zehnder modulator with enhanced plasma dispersion effect. Optics Express, 2016, 24, 1979.	3.4	14
23	A 25-Gb/s 5 Å— 5 mm ² Chip-Scale Silicon-Photonic Receiver Integrated With 28-nm CMOS Transimpedance Amplifier. Journal of Lightwave Technology, 2016, 34, 2988-2995.	4.6	20
24	25-Gbps error-free operation of chip-scale Si-photonics optical transmitter over 70°C with integrated quantum dot laser. , 2016, , .		13
25	Bit error rate analysis of a silicon optical interposer using its equivalent circuit. IEICE Electronics Express, 2015, 12, 20141084-20141084.	0.8	1
26	5 mW/Gbps hybrid-integrated Si-photonics-based optical I/O cores and their 25-Gbps/ch error-free operation with over 300-m MMF. , 2015, , .		39
27	Athermal silicon optical interposers operating up to 125°C. Proceedings of SPIE, 2015, , .	0.8	0
28	High speed and highly efficient Si optical modulator with strained SiGe layer. , 2015, , .		3
29	25-Gbps 5 mm chip-scale silicon-photonic receiver integrated with 28-nm CMOS transimpedance amplifier. , 2015, , .		5
30	First Demonstration of Athermal Silicon Optical Interposers With Quantum Dot Lasers Operating up to 125 °C. Journal of Lightwave Technology, 2015, 33, 1223-1229.	4.6	106
31	Demonstration of record-low injection-current variable optical attenuator based on strained SiGe with optimized lateral pin junction. Optics Express, 2015, 23, 12354.	3.4	7
32	SiGe-based carrier-injection Mach-Zehnder modulator with enhanced plasma dispersion effect in strained SiGe. , 2015, , .		3
33	Carrier injection refractive index changes in low-temperature grown silicon waveguide. , 2014, , .		2
34	Demonstration of 25-Gbps optical data links on silicon optical interposer using FPGA transceiver. , 2014, , .		4
35	First demonstration of athermal silicon optical interposers with quantum dot lasers operating up to 125 °C. , 2014, , .		0
36	High-density optical interconnects by using silicon photonics. Proceedings of SPIE, 2014, , .	0.8	8

#	ARTICLE	IF	CITATIONS
37	High-density and wide-bandwidth optical interconnects with silicon optical interposers [Invited]. Photonics Research, 2014, 2, A1.	7.0	40
38	Observation of suppressed dark current of Ge on Si (100) using ultrathin Ge seed layer. , 2014, , .		0
39	Fully Integrated Silicon Optical Interposers with High Bandwidth Density. , 2014, , .		0
40	High performance PIN Ge photodetector and Si optical modulator with MOS junction for photonics-electronics convergence system. , 2013, , .		3
41	High speed and highly efficient Si optical modulator with MOS junction for 1.55 μm and 1.3 μm wavelengths. , 2013, , .		8
42	Differential receivers with highly -uniform MSM Germanium photodetectors capped by SiGe layer. Optics Express, 2013, 21, 23295.	3.4	11
43	Si Waveguide-Integrated Metal-Semiconductor-Metal and n -Type Ge Photodiodes Using Si-Capping Layer. Japanese Journal of Applied Physics, 2013, 52, 04CG10.	1.5	34
44	Advances in High-Density Inter-Chip Interconnects with Photonic Wiring. IEICE Transactions on Electronics, 2013, E96.C, 958-965.	0.6	1
45	High-density Silicon Optical Interposer for Inter-chip Interconnects based on Compact and High Speed Components. , 2013, , .		2
46	Demonstration of 125-Gbps optical interconnects integrated with lasers, optical splitters, optical modulators and photodetectors on a single silicon substrate. Optics Express, 2012, 20, B256.	3.4	53
47	Demonstration of 12.5-Gbps Optical Interconnects Integrated with Lasers, Optical Splitters, Optical Modulators and Photodetectors on a Single Silicon Substrate. , 2012, , .		4
48	High-uniformity waveguide-integrated metal-semiconductor-metal germanium photodetector with siGe capping layer and its application to differential receivers. , 2012, , .		1
49	Differential signal transmission in silicon-photonics integrated circuit for high density optical interconnects. , 2011, , .		4
50	First demonstration of high density optical interconnects integrated with lasers, optical modulators, and photodetectors on single silicon substrate. Optics Express, 2011, 19, B159.	3.4	90
51	First Demonstration of High Density Optical Interconnects Integrated with Lasers, Optical Modulators and Photodetectors on a Single Silicon Substrate. , 2011, , .		4
52	InGaAs Nano-Photodiode Enhanced Using Polarization-Insensitive Surface-Plasmon Antennas. Japanese Journal of Applied Physics, 2011, 50, 120201.	1.5	3
53	InGaAs Nano-Photodiode Enhanced Using Polarization-Insensitive Surface-Plasmon Antennas. Japanese Journal of Applied Physics, 2011, 50, 120201.	1.5	10
54	Silicon Photonics Devices for Optical Interconnection. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
55	On-Chip Optical Interconnect. Proceedings of the IEEE, 2009, 97, 1186-1198.	21.3	129
56	Waveguide-integrated Si nano-photodiode with surface-plasmon antenna and its application to on-chip optical clock signal distribution. , 2008, , .		2
57	Low-loss Silicon Oxynitride Waveguides and Branches for the 850-nm-Wavelength Region. Japanese Journal of Applied Physics, 2008, 47, 6739-6743.	1.5	14
58	Numerical Study of Near-Infrared Photodetectors with Surface-Plasmon Antenna for Optical Communication. Japanese Journal of Applied Physics, 2008, 47, 2921-2923.	1.5	18
59	Photodetector Using Surface-Plasmon Antenna for Optical Interconnect. Materials Research Society Symposia Proceedings, 2008, 1145, 1.	0.1	2
60	Coherent control of exciton in a single InAs/GaAs quantum dot. , 2007, , .		0
61	Development of Nano-Photodiodes with a Surface Plasmon Antenna. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	2
62	Si Nano-Photodiode with a Surface-Plasmon Antenna for SiON Waveguide-Integrated Structure. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	2
63	Highly Efficient Surface-Plasmon Antenna and its Application to Si Nano-Photodiode. , 2006, , .		3
64	Development and applications of a Si nanophotodiode with a surface plasmon antenna. , 2006, , .		0
65	Si Nano-Photodiode with a Surface Plasmon Antenna. Japanese Journal of Applied Physics, 2005, 44, L364-L366.	1.5	300
66	Large Optical Transmission through a Single Subwavelength Hole Associated with a Sharp-Apex Grating. Japanese Journal of Applied Physics, 2005, 44, L170-L172.	1.5	23
67	Excitonic molecule in a quantum dot: Photoluminescence lifetime of a single InAs-GaAs quantum dot. Physical Review B, 2005, 72, .	3.2	18
68	Highly Enhanced Speed and Efficiency of Si Nano- Photodiode with a Surface-Plasmon Antenna. , 2005, , .		3
69	Low resistance magnetic tunnel junctions and their interface structures. Journal of Applied Physics, 2001, 89, 7558-7560.	2.5	18
70	Low-resistance tunnel magnetoresistive head. IEEE Transactions on Magnetics, 2000, 36, 2549-2553.	2.1	34
71	Underlayer effect on magnetoresistance of top- and bottom-type spin valves. Journal of Applied Physics, 1999, 85, 5021-5023.	2.5	12
72	Thermal stability of spin valve with NiO/Fe/sub 2/O/sub 3/ bilayer antiferromagnets. IEEE Transactions on Magnetics, 1998, 34, 954-956.	2.1	9

#	ARTICLE	IF	CITATIONS
73	Thermal fluctuation aftereffect of exchange coupled films for spin valve devices. Journal of Applied Physics, 1998, 83, 7210-7212.	2.5	34
74	Underlayer Effect on Magneto-Resistance in Spin-Valves. Japanese Journal of Applied Physics, 1997, 36, L1161-L1164.	1.5	6
75	Magneto-resistance in spin-valve structures with Ni-oxide/Co-oxide bilayer antiferromagnets. IEEE Transactions on Magnetics, 1996, 32, 4621-4623.	2.1	5
76	Magneto-resistance effects in spin-valve structures with CoO/NiO superlattices. IEEE Transactions on Magnetics, 1995, 31, 3936-3938.	2.1	16
77	Waveguide-Integrated Si Nano-Photodiode with Surface-Plasmon Antenna and its Application to On-chip Optical Clock Distribution. Applied Physics Express, 0, 1, 022001.	2.4	21
78	High-extinction-ratio Si optical modulator loaded with integrated polarizer. Japanese Journal of Applied Physics, 0, , .	1.5	0